

REMARKS

Reconsideration of the application is requested.

Claims 18, 21-29, and 31-40 are now in the application. Claims 18, 21-24, 26-28, and 31-40 are subject to examination and claims 25 and 29 have been withdrawn from examination. Claims 18, 23, 26, 27, and 40 have been amended. Claims 19, 20, and 30 have been canceled to facilitate prosecution of the instant application.

Under the heading "Claim Rejections – 35 USC § 101" on page 2 of the above-identified Office Action, claims 26-28 and 30-39 have been rejected as being directed to non-statutory subject matter.

The rejected claims have been amended such that each claim refers to only a single statutory class.

Under the heading "Claim Rejections – 35 USC § 112" on page 2 of the above-identified Office Action, claims 18-24, 26-28, and 30-40 have been rejected as failing to comply with the written description requirement.

Applicant has deleted the terms "predetermined spectral range" from the claims, and has reverted back to the previously used terms "narrow-band spectral range". Paragraph 20 clearly teaches concentrating a constant proportion of a output in a defined frequency range of the check-back signal in

a narrow-band spectral range.

Applicants believe that the last two limitations of claim 18 clarify the issue relating to narrow-band. The limitations are copied below:

wherein a concentration of a constant proportion of the output of the check-back signal is created in the narrow-band spectral range by evenly distributing ones and zeros from data of the check-back signal, followed by encoding; and

wherein scrambling is used to evenly distribute ones and zeros from the data of the check-back signal and then a CMI or RZ encoding is used to create a spectral line.

It is accordingly believed that the claims meet the requirements of 35 U.S.C. § 112, first paragraph.

Claims 18, 23, 26, 27, and 40 have been amended to better define the invention. Support for the changes to claims 18 and 23 can be found by referring to claims 18 and 19. Support for the changes to claims 26, 27, and 40 can be found by referring to claim 30.

Under the heading "Claim Rejections – 35 USC § 102" on page 5 of the above-identified Office Action, claim 40 has been rejected as being fully anticipated by German Patent No. DE 10046104 A1 to Thanhaeuser under 35 U.S.C. § 102.

Claim 40 now includes the following limitation, “wherein a regenerator with a subsequent decoding module with a descrambler is attached to an output of the gain controller to regenerate the decoupled signal”. Applicants believe it is clear that the copied limitation is not disclosed by Thanhaeuser.

Under the heading “Claim Rejections – 35 USC § 103” on page 6 of the above-identified Office Action, claims 18-21, and 26 have been rejected as being unpatentable over German Patent No. DE 10046104 A1 to Thanhauser under 35 U.S.C. § 103.

Claim 18 now specifies that scrambling is used to evenly distribute ones and zeros from the data of the check-back signal and then a CMI or RZ encoding is used to create a spectral line.

Claim 26 now includes the following limitation, “wherein a regenerator with a subsequent decoding module with a descrambler is attached to an output of the gain controller to regenerate the decoupled signal”.

Applicants believe it is clear that the limitations of claims 18 and 26, which have been copied above, are not disclosed or suggested by Thanhauser. With regard to now canceled claim 20, the Examiner has alleged that it would have been obvious to use CMI or RZ encoding.

Applicants admit that the codes RZ or CMI are known. However, using CMI/RZ encoded signals with distributed ones/zeros-data for achieving a spectral narrowing ("into a spectral line" over a scrambling step) of a "noise robust" check-back signal of a transmission system is really not obvious for one of ordinary skill in the art of detecting a spectrally narrowed control signals.

Applicants respectfully believe that if such limitations were truly obvious, then the Examiner should easily be able to find a teaching in which the claimed limitations are taught. However, applicants believe no such teaching can be found in the prior art.

Under the heading "Claim Rejections – 35 USC § 103" on page 7 of the above-identified Office Action, claims 22-24, 27-28, and 30-39 have been rejected as being unpatentable over German Patent No. DE 10046104 A1 to Thanhaeuser in view of U.S. Publication No. 2003/0072064 A1 to Ohta under 35 U.S.C. § 103.

Claim 23 now specifies that scrambling is used to evenly distribute ones and zeros from the data of the check-back signal and then a CMI or RZ encoding is used to create a spectral line.

Please see the remarks above with regard to claim 18. Thanhaeuser and Ohta would not have suggested the limitations of claim 23 copied above.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 18, 23, 26, 27, or 40. Claims 18, 23, 26, 27, and 40 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claim 18, 23, 26, 27, or 40.

In view of the foregoing, reconsideration and allowance of claims 18, 21-24, 26-28, and 31-40 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Please charge any fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stermer LLP, No. 12-1099.

Respectfully submitted,

/Mark P. Weichselbaum/
Mark P. Weichselbaum
(Reg. No. 43,248)

MPW:cgm

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Lerner Greenberg Stermer LLP
P.O. Box 2480
Hollywood, Florida 33022-2480
Tel.: (954) 925-1100; Fax: (954) 925-1101